

10/718,355 (OPT-112)

9/11/2005

REMARKS

Please charge any required fees and credit any overpayments to Deposit Account No. 50-2888. Any required extension of time for submitting the present response is hereby requested, if needed.

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RESTRICTION/ELECTION

The Office Action required election of one of claims 1-19 (group I) and claims 20-22 (group II). Applicants elect claims 1-19 (group I) for prosecution in the instant application, without traverse.

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Claims 20-22 were canceled without prejudice.

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Claims 1 and 19 were amended to explicitly recite that the protective tubes are movable along a part of the optical fiber enclosed by the tubes. Applicants submit that these claim amendments merely make explicit what was implicitly required in the original claims by the thermal strain relief language. Consequently, the amendments to claims 1 and 19 do not narrow the scope of the instant claims.

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New claims 23-26 were added. Claims 23-26 are fully supported by the specification as filed: for claims 23-24, see paragraph [0019], page 5 lines 21-22 of the specification; for claim 25, see paragraphs [0025] and [0027], page 7 lines 19-21 and page 8 lines 9-11; for claim 26, see for example paragraphs [0021] and [0024], page 6 lines 11-12 and page 7 lines 1-2, and Figs. 2-A-F. Claim 23 is limited to protective tube lengths on the order of meters (1-10 m), while claim 24 is limited to protective tube lengths in excess of 3 m. Claim 25 requires operation of the optical module package over a temperature range of at least 100 °C. Claim 26 requires each of the two recited protective tubes to have at least one of an internal gap and a free end; a free end may be an end of a tube section (adjacent to an internal gap in the tube, as shown in Figs. 2-A, among others) or a terminal free end (as shown in Fig. 2-D, among others).

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CLAIM REJECTIONS

Claims 1-12 and 19 were rejected under 35 U.S.C. 103(a) as being unpatentable over Graesser, U.S. Patent No. 6,517,253. Claims 13-18 were indicated to be allowable in view of the prior art of record.

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Applicants thank the Examiner for indicating the allowability of the subject matter of claims 13-18.

- 5 The rejections of claims 1-12 and 19 are traversed below.

35 U.S.C. §103

10 The Office Action stated that Graesser teaches "a flexible inner protective tube 8/9 enclosing the optical fiber 36/37, and a flexible outer protective tube 17/18 enclosing the inner protective tube 8/9, wherein the inner protective tube and the outer protective tube are longitudinally movable relative to the optical fiber along at least part of the optical fiber (see abstract)."

15 Applicants respectfully submit that the Office Action has not established that the inner ferrule housings 7/8 are movable with respect to the optical fibers 36/37 of Graesser. The Graesser abstract teaches that the protective tubes 8/9 are movable with respect to the fiber optic cable 4 of Graesser, and not with respect to the optical fibers 36/37 enclosed by the protective tubes 8/9 of Graesser. The abstract of Graesser states that "Between the fiber optic cable (4) and the inner ferrule individual housing (8,9), a movement-coupled connection (21, 22, 23, 121, 122, 20 123) is formed, which can be an additional housing." That is, the abstract of Graesser appears to teach that the housings 8/9 are movable with respect to the cable 4, not with respect to the optical fibers 36/37. Applicants were unable to find a teaching in Graesser that the optical fibers 36/37 are movable with respect to the housings 8/9 and 17/18. In fact, because ferrules 6/7 are fixed with respect to optical fibers 36/37, and because ferrule housings 8/9 are fixed 25 with respect to ferrules 6/7, it appears that ferrule housings 8/9 are fixed with respect to optical fibers 36/37.

30 Stated differently, the Office Action uses the term "optical fiber cable" of claim 1 to refer to different structures of Graesser in different parts of the rejection: in one part, the Office Action relies on the optical fiber cable 4 of Graesser being movable with respect to the inner ferrule housings 8/9 of Graesser (see Abstract); in another part, the Office Action states that optical fibers 36/37 are enclosed by housings 8/9. Applicants respectfully submit that the analysis set forth in the Office Action does not establish a prima facie obviousness case for claims 1 and 19.

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Applicants respectfully submit the instant claims to be patentable in view of the prior art of record, and request the Examiner to indicate the allowability of the instant claims in the next Office Action.

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Respectfully submitted, .

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